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09/470,234	12/22/1999	DAVID L. SALGADO	D/99173	5920

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EXAMINER	
POON, KING Y	
ART UNIT	**PAPER NUMBER**
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Please find below and/or attached an Office communication concerning this application or proceeding.

12/99

Office Action Summary	Application No. 09/470,234	Applicant(s) SALGADO ET AL.	
	Examiner King Y. Poon	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2/5/2004 and 3/15/2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *2 and 3* is/are allowed.

6)☒ Claim(s) *1 and 4-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 December 1999* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The drawing correction and the amendment filed on 2/5/2004 and 3/15/2004 has been accepted.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4-9, 11-13, 16-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Recht et al. (US 5,841,851)

Regarding claim 1: Recht teaches an apparatus (fig. 1) for connecting a transmission line (cord, column 2, line 33) that terminates with a connector (plug, column 2, line 33) to a device (telephone, column 2, lines 44), comprising: (a) a receptacle (fig. 4) for receiving the connector; and (b) a sensor (condition detector, column 7, lines 60-67) proximate to (condition detector and the receptacle are in the same base, fig. 2, fig. 3, and fig. 4, column 4, lines 20-21) the receptacle for detecting the presence of the connector within the receptacle (line connected, 808, 812, fig. 8, column 7, lines 50-67, column 8, lines 8-28, note).

Note: Column 2, lines 5-24, teaches the lines are connected by the presence of the connector within the receptacle. (Inserting the plug into the jack)

Regarding claim 4: Recht teaches the apparatus further comprising a signal detector (microprocessor, column 5, lines 45-60, ring detector, column 6, lines 37, speaker 222, column 5, lines 50-56, forms a signal detector) for detecting signals (e.g., signals, column 5, lines 45-55, column 6, lines 37-45) communicated through the transmission line.

Regarding claim 5: Recht teaches wherein the signal detector is for detecting a telephone dial tone. (Column 1, lines 29-32)

Regarding claim 6: Recht teaches wherein, in response to a signal from the sensor indicating that the connector is present within the receptacle, (above 0 volts, column 8, lines 10-27, to set up two line operating mode, column 8, lines 48-52, fig. 9) a determination is made, with the signal detector, whether signals (ringing signals) are being communicated through the transmission line. (1202, fig. 12, column 3, lines 32-38)

Regarding claim 7: Recht teaches wherein, in response to a failure by the signal detector to detect signals through the transmission line, (line disconnected, 802, 804, fig. 8) a determination is made, with the sensor, whether the connector is present within the receptacle. (808, 812, fig. 8)

Regarding claim 8: Recht teaches wherein the sensor is utilized to determine whether the connector is present within the receptacle when the device is activated. (Power up, fig. 8)

Regarding claim 9: Recht teaches wherein the signal detector is utilized to detect signals through the transmission line at times other than on device activation. (1102, fig. 11, column 7, lines 60-67)

Regarding claim 11: Retch teaches a method of communicating through a transmission line (cord, column 2, line 33) that terminates with a connector, (plug, column 2, line 33) adapted to be received in a receptacle, (fig. 4) comprising: (a) determining, with a sensor (condition detector, column 7, lines 60-67) proximate to (condition detector and the receptacle are in the same base, fig. 2, fig. 3, and fig. 4, column 4, lines 20-21) the receptacle, whether the connector is present within the receptacle; (line connected, 808, 802, fig. 8, column 7, lines 50-67, column 8, lines 8-28, note) and (b) determining whether a signal (e.g., signals, column 5, lines 45-55, column 6, lines 37-45) is being communicated through the transmission line.

Note: Column 2, lines 5-24, teaches the lines are connected by the presence of the connector within the receptacle. (Inserting the plug into the jack)

Regarding claim 12: Retch teaches wherein the step of determining whether the connector is present within the receptacle (fig. 9) occurs before the step of determining whether a signal is being communicated through the transmission line. (1202, fig. 12, column 8, lines 28-47, column 3, lines 35-40)

Regarding claim 13: Retch teaches the step of initiating activation of a device (power up, fig. 8) prior to the step of determining whether the connection is present within the receptacle.

Regarding claim 16: Retch teaches wherein the step of determining whether a signal is being communicated through the transmission line (voltage, column 8, lines 8-28) occurs before determining whether the connector is present within the receptacle. (The detected voltage is used to determine whether the connector is presented within the receptacle; i.e., voltage is detected before detecting connection)

Regarding claim 17: Retch teaches wherein, in response to determining that a signal is not being communicated through the transmission line, (detecting 0 volts, column 8, lines 21-28) determining whether the connector is present within the receptacle. (The processor 212 determines "connected" or "disconnected," column 7, lines 50-65)

Regarding claim 18: Retch teaches the step of initiating the step of determining whether a signal is being communicated through the transmission line (1202, fig. 12) at times other than activation of a device.

Regarding claim 19: Retch teaches in response to determining that the connector is present within the receptacle, (808, 1st line is connected, fig. 8) delaying processing of the operation currently being performed by the device (e.g., 1st line is in used currently, 1206, fig. 12, and 2nd line is in ringing, 1204, fig. 12, a user would select 2nd line for use, 1228, fig. 12, and delaying the used of the 1st line) when the current operation requires use of the transmission line.

Regarding claim 20: Retch teaches in response to determining that the plug connector is not present within the receptacle, (no to 900 and 904, fig. 9) aborting (disable, column 8, line 53) processing of the operation (the operation of allowing a user

to use line interface to use phone line, column 8, lines 50-56) currently being performed by the device when such operation requires use of the transmission line.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Retch et al (US 5,841,851).

Regarding claim 14: Retch does not teach teaches in response to determining that the connector is not present within the receptacle, requiring the operator to intervene in order for further operations to occur.

However, column 2, lines 5-23, teaches to insert the connector/plug into the phone jack/receptacle, for connection; i.e., in order for the connector to be present within the receptacle such that a user would use the phone, the user must insert the connector into the receptacle, when the connector is not present within the receptacle.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Retch to include: in response to determining that the connector is not present within the receptacle, requiring the

operator to insert the connector into the receptacle (intervene in order for further operations to occur).

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Retch because it would have allowed the system to work and a user would be able to use the system to make a phone call.

Regarding claim 15: Retch does not teach in response to determining that a signal is not being communicated through the transmission line, placing a device in a condition that is ready to perform further operations.

However, column 2, lines 5-23, teaches to insert the connector/plug into the phone jack/receptacle, for connection; i.e., in order for the connector to be present within the receptacle such that a user would use the phone, the user must insert the connector into the receptacle, when the connector is not present within the receptacle.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Retch to include: in response to determining that the connector is not present within the receptacle, requiring the operator to insert the connector into the receptacle (placing the device in a condition that is ready to perform further operations).

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Retch because it would have allowed the system to work and a user would be able to use the system to make a phone call.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horne (US 6,298,122) in view of Recht et al (US 5,841,851).

Regarding claim 10: Horne teaches a printing machine (fax machine column 2, 31) capable of communicating through a transmission line (telephone wire, column 2, line 34) that terminates with a connector, (RJ -11 plug, column 4, lines 64-65) comprising: (a) a receptacle for receiving the connector. (female RJ-11 connector, column 4, lines 56).

Horne does not teach a sensor proximate to the receptacle for detecting the presence of the connector within the receptacle; and a sensor circuit, communicating with the detecting sensor, for transmitting a signal indicating whether the detecting sensor detects the presence of the connector.

Recht, in the same field of communicating signals using telephone wires (tip and ring, fig. 1, Horne; column 5, lines 30-35), teaches a sensor (condition detector, column 7, lines 60-63) proximate to (condition detector and the receptacle are in the same base, fig. 2, fig. 3, and fig. 4, column 4, lines 20-21) the receptacle (phone jack, column 7, lines 14-20) for detecting the presence of the connector within the receptacle; (808, 812, fig. 8, column 2, lines 5-25) and a sensor circuit, (microprocessor, column 7, line 62) communicating with the detecting sensor, (column 7, lines 60-65) for transmitting a signal (a signal to enable or disable a user interface, column 8, lines 55-67) indicating whether the detecting sensor detects the presence of the connector. (Column 2, lines 5-25, connected, is when the plug is being inserted into the receptacle)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Horne' printing machine to include: a sensor proximate to the receptacle for detecting the presence of the connector within the receptacle; and a sensor circuit, communicating with the detecting sensor, for transmitting a signal indicating whether the detecting sensor detects the presence of the connector.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Horne' printing machine by the teaching of Recht because of the following reasons: (a) it would have allowed the printing machine to inform users that the phone line is not connected to minimized confusion to the users, as taught by Retch at column 8, lines 47-65, column 9, lines 35-45; and (b) it would have allowed the users to realize that the phone line is not connected so that the user would connect the phone line for fax machine to be properly functioning.

Allowable Subject Matter

7. Claims 2 and 3 are allowed.

8. The following is a statement of reasons for the indication of allowable subject matter:

Claim 2 is allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose an apparatus for connecting a transmission line that terminates with a connector to a device comprising a sensor associated with the receptacle for detecting the presence of the connector within the receptacle, "wherein the sensor comprises a pressure switch within the receptacle." It is noted that the closest prior art, Recht et al, (US 5,841,851) shows a similar apparatus for connecting a transmission line comprising a sensor for detecting the presence of the connector within the receptacle. However Recht et al fails to disclose: "wherein the sensor comprises a pressure switch within the receptacle," as claimed.

Claim 3 is allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose an apparatus for connecting a transmission line that terminates with a connector to a device comprising a sensor associated with the receptacle for detecting the presence of the connector within the receptacle, "wherein the sensor comprises an optical sensor within the receptacle." It is noted that the closest prior art, Recht et al, (US 5,841,851) shows a similar apparatus for connecting a transmission line comprising a sensor for detecting the presence of the connector within the receptacle. However Recht et al fails to disclose: "wherein the sensor comprises an optical sensor within the receptacle," as claimed.

Response to Arguments

9. Applicant's arguments filed on 2/5/2004 have been fully considered but they are not persuasive.

With respect to applicant's argument, on the middle of page 11, that Recht's condition detector (column 7, lines 51-column 8, line 20), is a software program coupled with a voltage meter; the detector is not a sensor and is not proximate to the phone line receptacle, has been considered.

In reply: A sensor is a device that receives and response to a signal. The software of column 7, lines 51-column 8, line 20, is run by a microprocessor and is not the detector.

The sensor of Recht is the condition detector (column 7, lines 60-61), which receives a voltage signal (column 8, lines 8-20) and response with a detection signal (column 7, line 61). Fig., 2, shows that condition detectors (232, 234) are located within a base station, column 4, lines 20-21. Fig. 3 shows that the receptacle (304, 306) is also located within the based station. Therefore, the condition detector is proximate (close to) to the receptacle.

With respect to applicant's argument on page 12, that Recht does not teach sensing whether a dead line is due to a disconnected connector or to some other problem within the phone line, has been considered.

In reply: Claims 14, and 15 is not claiming sensing a dead line due to a disconnected connector or to other problems. The sensor of claims 14 and 15 is used to detect whether the connector is present within the receptacle.

Column 7, lines 60-67, column 8, lines 10-20, Recht, teaches to detect whether a phone line is connected or not. Column 2, lines 14-24, defines the connection is whether a plug has been inserted (presented in a receptacle) into a phone jack (receptacle).

It is true that when a phone line is dead, the detector cannot detect whether the line is connected or not. When Recht talks about detecting connection, we must assume that the signal supplied to the detector is working properly.

Since all sensors requires input signals. When the body that supplies the signal is not working, the sensor cannot sense anything. Therefore, when reading claim limitation of claims 14, 15, we must assume that the signal to the sensor is working properly. For example, a failure of light sensor 93 to detect reflected light indicates that plug 82 is presented in receptacle (applicant's specification, page 10, lines 10-13). In this case we must assume that the light being sense by the sensor is working properly.

Applicant's argument that assuming the phone line is dead (the signal to the sensor), is arguing the case that the light emitting diode (page 10, line 8, applicant's specification) of the present invention is dead. If the light emitting diode 91 is dead, plug 82 will be indicated as being presented in the receptacle even though plug 82 has been unplugged.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is (703) 305-0892 or to Supervisor Mr. David Moore whose phone number is (703) 308-7452.

March 29, 2004